UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,611	11/04/2002	Chen-Ho Lee	9448-US-PA	2461

31561 7590 07/03/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER	
WORKU, NEGUSSIE	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,611	LEE, CHEN-HO	
	Examiner	Art Unit	
	Negussie Worku	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 November 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Negussie Worku

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 through 16 have been examined in the application. Claims 1 and 9 are independent, and claims 2-8 and 10-16 are dependent.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure

describes," etc. Applicant is reminded of the proper content of an abstract of the disclosure. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore," adjusting time via shift signal according to a speed of reading the data of the scan line by the computer" this configuration of the elements" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 and 9 " a method of removing a memory from scanning apparatus" is not clear or the clamed language do not correspond to the

scope of the claimed language. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinsky et al. (USP 6,285,398) in view of (USP 6,580,457).

With respect to claim 1, a method of removing a memory of a scanning apparatus (fig 3), wherein the scanning apparatus (100 fig 3), comprises an image extraction device (camera 100 [CCD 12] of fig 3) operative to transmit each pixel of data of a scan line to a computer (computer 200 of fig 3) during a period referred to as an exposure time of a dumping signal via a shift signal, (exposure controller 322 of fig 4A) the method (fig 3).

Shinsky et al. does not expressly teach adjusting a period of the shift signal according to a speed of reading the data of the scan line by the computer, allowing the computer to finish reading the data of the scan line in the exposure time.

However, Armstrong et al. in the same area of image scanning apparatus and method of controlling image sensor teaches adjusting a period of the shift signal (CCD timing generator 32 of fig 1, performs adjusting reading out timing of the image, to the computer 12 of fig 1) according to a speed of reading the data of the scan line by the computer (host-computer 12 of fig 1), allowing the computer to finish reading the data of the scan line in the exposure time (exposure time res mode fig 1, col.3, lines 33-38).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Shinsky et al. to include: adjusting a period of the shift signal according to a speed of reading the data of the scan line by the computer, allowing the computer to finish reading the data of the scan line in the exposure time.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Shinsky by the teaching of Armstrong et al. for the purpose of controlling a light emitting and exposing device in order to avid over exposed or saturated light over the image to be read during scanning operation for obtaining a perfect final image, for all the scanned of different color to be exactly superimpose.

With respect to claim 2, Shinsky teaches the method (fig 3), wherein when the shift signal transmits (via interface 102 of fig 3) each pixel of the data of the scan line to the computer (host-computer 200 of fig 3) in a time shorter than the exposure time, a waiting time is added to equal the exposure time (brightness and contrast controller 322

of fig 4A).

With respect to claim 3, Shinsky teaches the method (fig 3) wherein the exposure time is constant (brightness and contrast controller 322 of fig 4A).

With respect to claim 4, Shinsky teaches the method (fig 3) wherein the exposure time is variable (brightness and contrast controller 322 of fig 4A).

With respect to claim 5 and 6, Shinsky teaches the method (fig 3) wherein the dumping (shifting) signal is enabled at a high level, (brightness and contrast controller 322 of fig 4A).

With respect to claim 7, Shinsky teaches the method (fig 3), wherein the image extraction device (100 of fig 3) includes a charge-coupled device (CCD 12 of fig 3).

With respect to claim 8, Shinsky teaches the method (fig 3), wherein the memory (104 of fig 3) includes a dynamic random access memory, (DRAM, col.4, lines 55-60).

With respect to claim 9, a method of removing a memory of a scanning apparatus (fig 3), wherein the scanning apparatus (100 fig 3), comprises an image extraction device (camera 100 [CCD 12] of fig 3) operative to transmit each pixel of data of a scan line to a computer (computer 200 of fig 3) during a period referred to as an

exposure time of a dumping signal via a shift signal, (exposure controller 322 of fig 4A) the method (fig 3).

Shinsky et al. does not expressly teach shortening a period of the shift signal when the computer uses a fast processing speed to process the data of the scan line; and increasing the period of the shift signal when the computer uses a slow processing speed to process the data of the scan line; wherein the computer has to finish reading the data of the scan line in the exposure time.

However, Armstrong et al. in the same area of image scanning apparatus and method of controlling image sensor teaches shortening a period of the shift signal when the computer uses a fast processing speed to process the data of the scan line (CCD timing generator 32 of fig 1, performs adjusting reading out timing of the image, to the computer 12 of fig 1); and increasing the period of the shift signal when the computer (host-computer 12 of fig 1), uses a slow processing speed to process the data of the scan line; wherein the computer has to finish reading the data of the scan line in the exposure time (exposure time res mode fig 1, col.3, lines 33-38).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Shinsky et al. to include: shortening a period of the shift signal when the computer uses a fast processing speed to process the data of the scan line; and increasing the period of the shift signal when the computer uses a slow processing speed to process the data of the scan line; wherein the computer has to finish reading the data of the scan line in the exposure time.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Shinsky by the teaching of Armstrong et al. for the purpose of controlling a light emitting and exposing device in order to avid over exposed or saturated light over the image to be read during scanning operation for obtaining a perfect final image, for all the scanned of different color to be exactly superimpose.

With respect to claim 10, Shinsky teaches the method (fig 3), wherein when the shift signal transmits (via interface 102 of fig 3) each pixel of the data of the scan line to the computer (host-computer 200 of fig 3) in a time shorter than the exposure time, a waiting time is added to equal the exposure time (brightness and contrast controller 322 of fig 4A).

With respect to claim 11, Shinsky teaches the method (fig 3) wherein the exposure time is constant (brightness and contrast controller 322 of fig 4A).

With respect to claim 12, Shinsky teaches the method (fig 3) wherein the exposure time is variable (brightness and contrast controller 322 of fig 4A).

With respect to claim 13 and 14, Shinsky teaches the method (fig 3) wherein the dumping (shifting) signal is enabled at a high level, (brightness and contrast controller 322 of fig 4A).

With respect to claim 15, Shinsky teaches the method (fig 3), wherein the image extraction device (100 of fig 3) includes a charge-coupled device (CCD 12 of fig 3).

With respect to claim 16, Shinsky teaches the method (fig 3), wherein the memory (104 of fig 3) includes a dynamic random access memory, (DRAM, col.4, lines 55-60).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DOUGLAS Q. TRAN
PRIMARY EXAMINER

6/01/06